Ignatius Ajuru University of Education
Journal of Technical Education

ISSN: 3141-2785

Print ISSN: 3141-2785
https://iauejournals.com
Volume 1; Issue 1; April 2026; Page No. 9-15.

Role of Mechanical Technology Education in Curbing Cyber-Crimes Among Youths in Rivers State

***Wordu, C.C.R., David, G.U., & Anaele, S.C.**
Department of Technical Education, Ignatius Ajuru University of Education, Port Harcourt, Nigeria

***Corresponding author email:** chiduhiegem.wordu@iaue.edu.ng

Abstract
This study examined the role of Mechanical Technology Education in curbing cybercrime among youths in Rivers State, Nigeria, with emphasis on welding/fabrication and fittings. A descriptive survey research design was adopted for the study. The population comprised 28 Mechanical Technology Education lecturers and instructors from Ignatius Ajuru University of Education and Rivers State University, Port Harcourt. Data were collected using a structured questionnaire based on a five-point Likert scale. The instrument yielded a reliability coefficient of 0.87 using the Pearson Product Moment Correlation method. Mean and standard deviation were used to answer the research questions, while a t-test was employed to test the hypotheses at a 0.05 level of significance. Findings revealed that welding/fabrication contributes significantly to reducing cybercrime through skill acquisition, self-employment, and innovation, while fittings contribute moderately through the promotion of technical competence and industrial productivity. The study further revealed no significant difference between the mean responses of lecturers and instructors. The study concluded that Mechanical Technology Education is an effective tool for youth empowerment and cybercrime reduction. It recommended the integration of ICT skills into the curriculum and stronger government-industry partnerships to enhance youth employment opportunities.

Keywords: Mechanical Technology Education, Welding, Fabrication, Fittings, Cybercrime

Introduction

However, technical education places an emphasis on "applied science and modern technology" and teaches students the "hands-on" skills and information needed for a certain job or trade. As described by Olowe (2023), technical education is a secondary school program that aims to educate pupils in a variety of trades and occupations, including more conventional ones like teaching, secretarial work, agro-veterinary medicine, and nursing. Therefore, careers in technical fields, which are above skilled trades but below professional fields like engineering and science, are best suited to graduates of technical schools. Becoming a technician in fields like healthcare, computer science, or automotive repair is one example. In response to a demand for technicians and in an effort to improve the standard of vocational training, particularly for underserved populations, technical education was established. Colleges and other post-secondary institutions often provide this kind of education because of its significance to economic growth. This is why, according to Olowe (2023), students enrolled in Technical Education programs may choose from a wide variety of specialities designed to help them get good jobs. Woodworking, metalworking, construction, electrical engineering, electronics, appliance repair, car service, aircraft maintenance, business machine maintenance, and a host of other construction and maintenance fields like carpentry, electricity, masonry, plumbing and pipe fitting, drafting, electronics occupation, and refrigeration are the main areas of focus in the offered options. Technical schools provide a variety of programs, including agricultural education, building technology, business education, electrical and

Cite this article as:
Wordu, C. C. R., David, G. U., & Anaele, S. C. (2026). Role of mechanical technology education in curbing cyber-crimes among youths in Rivers State. *IAUE Journal of Technical Education, 1*(1), 9-15.

electronics technology, hospitality and hotel management, mechanical technology, and more (Adamu et al., 2025), which lend credence to Olowe's claim.

As a Subsystem of Technical Education Programs, Mechanical Technology Education: A subset of technical education programs, mechanical technology education seeks to provide students with competence in mechanical systems. Mechanical technology education, according to Uka and Ochogba (2019), includes metalwork and automotive technology courses. Car technology education, they continued, is a course of study at universities that aims to produce graduates capable of working as mechanics or assembly line workers in the automotive industry. The objective is to educate people who can, among other things, identify problems, fix them, spray them, fix engines, work on electrical and electronics, vulcanise tyres, and sell car parts. Because they have gone through formal institutions where they have gained better coordinated knowledge and abilities that are needed on the job, students who pursue education in automobile technology are expected to engage in successful self-employment after graduation (Onwusa et al., 2021). Contrarily, according to Ugbelu in Ajie et al. (2022), metalwork technology education programs are designed to provide students with marketable skills that may be used for both self-sufficiency and paid employment. Among the many topics covered in this subfield of mechanical technology are foundry procedures, fabrication, welding, forging, machine shop operations, and equipment maintenance duties. The result is that at certain schools, students majoring in automotive technology and those majoring in metalworking technology are run in distinct departments. Having said that, the researchers did note that there are certain schools where mechanical technology is taught alongside automotive repair and metalwork manufacturing, rather than separately. Machine shop practice, construction methods, electrical circuits, and graphics are some of the theoretical subjects covered in mechanical technology (Nwankwo & Ogan, 2025). Related practical skills include foundry, forging, machining, welding, fabrication, and fittings.

As a kind of engineering skill, welding and fabrication at technical institutes focus on shaping and joining metals to create practical items and buildings. It is a skill in mechanical engineering that may help one take advantage of the business opportunities presented by technical colleges. Using heat and pressure to combine metals—with or without filler materials—is what welding and fabrication are all about (American Welding Society, 2013). Training programs in welding and fabrication aim to turn out workers who are well-versed in the tools, materials, procedures, and safety protocols needed to complete metalwork tasks safely and effectively. A person with welding and fabrication skills may utilise their hands and brains to create metal structures according to engineering drawings. People who work in this field often have expertise in pressure-related construction or structural fabrication (Idibia et al., 2022). According to Overtoom, as mentioned in Aikhionbare (2016), it also helps people gain practical knowledge that allows them to be productive, innovative, competitive, determined, and creative when faced with national and globalisation-related difficulties. Forge welding, gas welding, underwater welding, resistance welding, and metal arc welding are some of how welding was categorized by the American Welding Society (2013). Thermit and induction welding are two examples of these processes.

However, fittings are components used to link, regulate, or terminate elements of a metalwork system in the context of metalworking technology. Thomas (2020) lists elbows, tees, reducers, couplings, unions, flanges, caps, and plugs as the most frequent kinds of fittings. New materials, smart systems, and improved production processes are the foundation of modern metalworking technology. The welded steel design of the framework allows these fittings to be linked with plastic pipes (Dobrota et al., 2020). Additionally, they went on to say that a Heat Affected Zone (HAZ) must be designed into the welded connection in order for the plastic pipes' properties to be as little affected by the HAZ as feasible due to the presence of the welded joint. So, a country or state may prosper and achieve peace if its citizens are adequately trained and educated in mechanical technology, and if they are able to succeed professionally in their chosen fields (Abidoye, 2020). Mechanical technology education, as pointed out by Abalogu and Nwokedi (2024), educates young people adequately, gives them the tools they need to become their own bosses, and helps them achieve financial security and autonomy. So, learning about mechanical technology might be a great way to give young people a voice.

When young people are empowered, it's because "the process of enhancing young people's capabilities, resources, and opportunities for making meaningful contributions to society, and for achieving economic independence" (Nwogu & Okwelle, 2021). What we mean when we talk about youth empowerment is giving young people the tools they need to improve their own lives and the lives of those around them. Another way to put it is as a tool for encouraging the next generation to achieve greatness, both individually and collectively. In addition to educating and preparing young people for the responsibilities and difficulties of adulthood, it is said to empower them in many other ways.

Cite this article as:
Wordu, C. C. R., David, G. U., & Anaele, S. C. (2026). Role of mechanical technology education in curbing cyber-crimes among youths in Rivers State. *IAUE Journal of Technical Education, 1*(1), 9-15.

Additionally, it is said to empower youth and inspire them to pursue self-employment. Additionally, it is characterised as a method of enabling youth to acquire knowledge and pass it on to themselves and society at large. Another way of putting it is that it has to do with letting young people make big life choices on their own, without constant micromanagement. The process of youth empowerment is providing young people with the tools they need to become self-reliant, which in turn reduces the likelihood of cybercrime. When criminals target or utilise computer networks and digital devices, they are committing cybercrime. The phrase encompasses a wide range of crimes committed utilising these mediums. Onwuadiamu (2025) states that this problem is always changing and affects people, organisations, and governments all around the globe. According to the Economic and Financial Crimes Commission (EFCC, 2023), among other things, internet fraud, phishing, and hacking are prevalent among young people in Nigeria ("Yahoo Yahoo"). Theft, embezzlement, or misappropriation of funds through computer technology or modern devices that replace it is considered cybercrime. Destroying a computer or its software is also considered cybercrime. Illegal actions aimed at the peace and security of mankind on an international level are also considered cybercrime. Cybercrime is defined as any unlawful conduct that gathers evidence via the use of a computer (Pazilovich & Mahammadjonovich 2021). For instance, in recent years, there has been a dramatic increase in the prevalence of cybercrime, including hacking, virus distribution, and the use of computers to perpetrate other forms of crime such as murder, terrorism, and the theft of sensitive personal information. Theft of sensitive information, illegal drug trade, and fraudulently altering financial transactions via the use of incorrect codes are all examples of cybercrime, as stated by Goni et al. (2022). Cybercrime encompasses a wide range of online offences, including but not limited to: cyberbullying, malware and viruses, illegal information preparation and dissemination, spamming, hacking, illegal website access, fraud, data integrity and copyright infringement, phishing, and farming, among others (Mikkola et al., 2021). Cybercrime among young people is a growing problem, and Okwelle and Oyenuga (2021) argue that this is due in part to their economic hardship and a lack of technical participation.

Recently, cybercrime, especially among Nigeria's youth, has emerged as a major social and economic concern. Cybercrime, such as hacking, identity theft, phishing, cyber fraud (Yahoo Yahoo!), and financial scams, has increased alongside the expansion of digital technologies, mobile devices, and the internet, which has created new channels for communication, entrepreneurship, and economic opportunities (Adebayo & Abdulhamid, 2018). Factors including young unemployment, social pressure, the need for instant gratification, and moral decline are contributing to the alarming rise in cybercrime in Nigeria (Okeshola & Adeta, 2019). Cybercrime has become so common, especially financial fraud, that it has changed the way young Nigerians see achievement and hard work. As a result, cybercrime has been revered in Nigerian society (Eze, 2020). On top of that, most young Nigerians don't have any marketable skills in mechanical technology, which leaves them jobless, and the temptation to become rich fast via cybercrime is growing. This study's main concern is the prevalence of cybercrime among young Nigerians, which may be linked to their limited proficiency in mechanical technology. By deterring foreign investment and confidence in the digital world, this growing tendency not only damages the country's worldwide image, but it also undermines national security, ethical principles, and the job prospects of young people (Olayemi, 2014). Also, the government has tried to solve this problem by passing laws like the Cybercrime (Prohibition, Prevention, etc.) Act of 2015 and by creating cybercrime units inside police departments, but the problem is only becoming worse (Aborode et al., 2021).

This study aimed to determine the roles of mechanical technology education in curbing cybercrimes among youths in Rivers State. Specifically, the study sought to determine the:

1. roles of welding/fabrication in curbing cybercrimes among youths in Rivers State.
2. roles of fittings in curbing cybercrimes among youths in Rivers State.

The following research questions guided the study;

1. What are the roles of welding/fabrication in curbing cybercrimes among youths in Rivers State?
2. What are the roles of fittings in curbing cybercrimes among youths in Rivers State?

The following null hypotheses guided the study, and they were tested at the .05 level of significance:

1. There is no significant difference between the response mean scores of lecturers and instructors on the roles of welding/fabrication in curbing cybercrimes among youths in Rivers State.
2. There is no significant difference between the response mean scores of lecturers and instructors on the roles of fittings in curbing cybercrimes among youths in Rivers State.

Cite this article as:
Wordu, C. C. R., David, G. U., & Anaele, S. C. (2026). Role of mechanical technology education in curbing cyber-crimes among youths in Rivers State. *IAUE Journal of Technical Education, 1*(1), 9-15.

Methodology

In order to gather data from a statistically valid sample of the population and draw conclusions about the correlations between variables, this study used a descriptive survey research methodology. A total of twenty-eight professors and instructors from Rivers State University and Ignatius Ajuru University of Education in Port Harcourt participated in this study. This study made use of the whole sample size since it was doable. Mechanical Technology Skills and Cybercrime Questionnaire (MTS-CQ) was a structured questionnaire used for data collection. It utilised a five-point Likert scale with the following response options: Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD). Three (3) specialists in mechanical technology education from the two (2) chosen institutions, as well as one (1) professor from Rivers State University, Port Harcourt, verified the questionnaire. The reliability testing was conducted using the Pearson product-moment correlation, which yielded results of 0.87 and 0.89, resulting in a coefficient of 0.88. The data were gathered by having study assistants hand out questionnaires to the participants. The study questions were answered by analysing the data using descriptive statistics such as standard deviation and mean, and the null hypotheses were tested using the inferential statistic of a t-test. Any mean answer of 3.5 or more was deemed as "Agree," while any mean response below 3.5 was deemed as "Disagree." The decision-making process was based on the criterion mean of 3.5. The null hypotheses were considered "accepted" when tested with a two-tailed significance level of.05 or above, and "rejected" otherwise.

Results

Research Question 1: What are the roles of welding/fabrication in curbing cybercrimes among youths in Rivers State?

Table 1: Mean response on the roles of welding/fabrication in curbing cybercrimes among youths

S/N	The roles of welding/fabrication in curbing cybercrimes among youths	Lecturers			Instructors		
		$\bar{X}$	SD	Remark	$\bar{X}$	SD	Remark
1.	Support for construction industries	3.50	1.3	Agree	4.00	.70	Agree
2.	Promotion of entrepreneurship	3.30	.99	Agree	3.40	1.00	Agree
3.	Infrastructure Rehabilitation	3.10	.70	Agree	3.30	.98	Agree
4.	Innovation and technology development	3.50	1.0	Agree	3.70	.65	Agree
5.	Shipbuilding and marine operations	3.80	.85	Agree	3.80	1.30	Agree
6.	Enhancement of national economy	2.90	.88	Agree	2.00	.95	Agree
7.	Production of domestic and industrial equipment	3.60	.96	Agree	3.90	.89	Agree
8.	Skill development and technical training	4.10	1.1	Agree	4.00	1.40	Agree
9.	Employment generation	3.70	.80	Agree	3.50	1.20	Agree
10.	Repairs and maintenance works	4.10	.98	Agree	4.00	.99	Agree
Grand Mean & SD		**3.50**	**.96**	**Agree**	**3.56**	**1.00**	**Agree**

Source: Field Data (2026)

The results in Table 1 revealed that the respondents agreed to a high role with item 1-10, which had the following mean values 3.5, 4.0, 3.3, 3.4, 3.1, 3.3, 3.5, 3.7, 3.8, 3.8, 2.9, 2.0, 3.6, 3.9, 4.1, 4.0, 3.7, 3.5, 4.1, 4.0 with a grand mean of 3.56 and 3.56 and a standard deviation of 1.3, .70, .99, 1.0, .70, .98, 1.0, .65, .85, 1.3, .88, .95, .96, .89, 1.1, 1.4, .80, 1.2, .98. .99 with a grand standard deviation of .956 and 1.00 for lecturers and instructors, respectively. The lecturers and instructors agreed that welding/fabrication plays a major role in curbing cybercrimes among youths. The closeness in standard deviation showed that the respondents were homogenous in their responses.

Cite this article as:
Wordu, C. C. R., David, G. U., & Anaele, S. C. (2026). Role of mechanical technology education in curbing cyber-crimes among youths in Rivers State. *IAUE Journal of Technical Education, 1*(1), 9-15.

Research Question 2: What are the roles of fittings in curbing cybercrimes among youths in Rivers State?

Table 2: Mean response on the roles of fittings in curbing cybercrimes among youths

S/NO	The roles of fittings in curbing cybercrimes among youths	Lecturers $\bar{X}$	SD	Remark	Instructors $\bar{X}$	SD	Remark
11	Assembly of machine components	4.5	1.2	Agree	3.8	1.0	Agree
12	Precision and accuracy	3.5	.87	Agree	4.0	.98	Agree
13	Testing of mechanical systems	3.7	.99	Agree	3.1	.95	Agree
14	Production of machine tools	2.5	1.0	Disagree	2.9	.79	Disagree
15	Prototype development	3.0	1.3	Agree	2.9	.85	Disagree
16	Quality control	3.6	.83	Agree	3.8	.77	Agree
17	Reduction of machine failure	3.8	.70	Agree	3.6	1.2	Agree
18	Enhancement of industrial productivity	3.7	1.0	Agree	3.5	.97	Agree
19	Leak prevention in pipe systems	3.4	.98	Agree	3.9	.88	Agree
20	Cost reduction	3.0	.96	Agree	2.8	.85	Disagree
Grand Mean & SD		**3.47**	**.98**	**Agree**	**3.43**	**.92**	**Agree**

Source: Field Data (2026)

The results in Table 2 revealed that the respondents agreed to a low role with item 11-20, which had the following mean values 4.5, 3.8, 3.5, 4.0, 3.7, 3.1, 2.5, 2.9, 3.0, 2.9, 3.6, 3.8, 3.8, 3.6, 3.7, 3.5, 3.4, 3.9, 3.0, 2.8 with a grand mean of 3.47 and 3.43 and a standard deviation of 1.2, 1.0, .87, .98, .99, .95, 1.0, .79, 1.3, .85, .83, .77, .70, 1.2, 1.0, .97, .98, .88, .96, .85 with a grand standard deviation of .98 and .92 for lecturers and instructors respectively. The lecturers and instructors agreed that fittings play a minor role in curbing cybercrimes among youths. The similarity in standard deviations indicated that the respondents were homogeneous in their responses.

Hypotheses Testing

Hypothesis 1: There is no significant difference between the response mean scores of lecturers and instructors on the roles of welding/fabrication skills in curbing cybercrimes among youths in Rivers State.

Table 3: t-test analysis on the Roles of Welding/Fabrication Skills in Curbing Cybercrimes among Youths in Rivers State

Respondents	N	Mean ($\bar{X}$)	SD	DF	p-value	t-cal	t-crit	Decision
MTE Lecturers	24	3.56	.956					
				26	0.05	0.00	2.056	H_o Accepted
MTE Instructors	4	3.56	1.00					

Source: Field Data (2026)

Table 3 shows that at 26 degrees of freedom, the calculated value of 0.00 is less than the critical value of 2.056, indicating that there is no significant difference between the response mean scores of Lecturers and Instructors on the roles of welding/fabrication in curbing cybercrimes among youths in Rivers State; hence, the hypothesis was accepted.

Hypothesis 2: There is no significant difference between the response mean scores of lecturers and instructors on the roles of fitting skill in curbing cybercrimes among youths in Rivers State.

Table 4: t-test analysis on the Roles of Fitting Skills in Curbing Cybercrimes among Youths in Rivers State

Respondents	N	Mean ($\bar{X}$)	SD	DF	p-value	t-cal	t-crit	Decision
MTE Lecturers	24	3.47	.983					
				26	0.05	0.08	2.056	H_o Accepted
MTE Instructors	4	3.43	.924					

Source: Field Data (2026)

Table 4 shows that at 26 degrees of freedom, the calculated value of 0.08 is less than the critical value of 2.056, indicating that there is no significant difference between the response mean scores of Lecturers and Instructors on the roles of fittings in curbing cybercrimes among youths in Rivers State; hence, the hypothesis was accepted.

Cite this article as:
Wordu, C. C. R., David, G. U., & Anaele, S. C. (2026). Role of mechanical technology education in curbing cyber-crimes among youths in Rivers State. *IAUE Journal of Technical Education, 1*(1), 9-15.

Discussion

The purpose of this research was to examine the relationship between cybercrime and the availability of mechanical technology skills, welding/fabrication, and fittings among Nigerian adolescents in the state of Rivers. The results showed that although fittings do not directly involve the youth in the fight against cybercrimes through the use of technology, it does play a modest role by providing them with technical skills. Welding/Fabrication, on the other hand, plays a substantial role by providing the youth with the necessary skills and employment opportunities. Although the exact subject of study determines success, this research's results suggest that mechanical technology education may be a good instrument for adolescent engagement. Idibia et al. (2022) argued that welding and manufacturing are still important tools for empowering adolescents and combating social vices like cybercrime; this research backs up their claims. When it comes to this, welding and fabrication are more hands-on because they give the kids a chance to work and be independent, while fittings are more hands-off since they involve them technically. Therefore, mechanical technology training programs may make a bigger difference in reducing cybercrime among young Nigerians if they included modern technical skills such as information and communication technology literacy, digital machine operation, and computer-aided design.

Fittings as a vocational programme places more emphasis on mechanical and industrial operations than on digital and information and communication technology (ICT) abilities, which may explain why the study found that fitting skills—such as assembling, testing, and maintaining precision in mechanical systems—contribute very little to employment prospects and productive engagements. Consequently, such training is still seen to have a little overall impact on reducing cybercrime among Nigerian teenagers, even if it discourages them from participating in such crimes. Consistent with previous research by Olaitan and Nwachukwu (2018); Okoye and Okwelle (2014); and Uwaifo (2009), this study finds that fitting trade cannot effectively reduce cybercrime among young Nigerians due to the lack of direct digital engagements involved. On the other hand, encouraging young people to pursue careers in fitting might help curb discontent while also teaching them discipline, dedication, and the value of workmanship.

Conclusion

Education in mechanical technology may play a vital role in reducing cybercrime by providing young people with marketable skills, fostering independence, and instilling moral values. Also included are the societal and economic aspects that contribute to cybercrime, such as joblessness, inactivity, and aimlessness. One way to combat cybercrime and promote sustainable development is for state governments to make strategic investments in mechanical technology education, like the one in Rivers State. This might channel the creative energies of young people into constructive endeavours. Findings should provide light on how teaching welding/fabrication and fittings as part of a mechanical technology curriculum could help reduce cybercrime among Rivers State's youth. The research found that mechanical technology education may help reduce cybercrime among young people by giving them skills that employers want and encouraging them to be independent.

Recommendations

Based on the findings from the study, the following recommendations were proposed:

1. to increase the relevance of mechanical technology education in the fight against cybercrime, it is recommended that digital and ICT-based competencies be incorporated into the training of students undertaking mechanical trades such as welding, fabrication, and fittings.
2. The government should work closely with various industries and training centres to improve the training of youths undertaking mechanical technology.

References

Abalogu, D. M., & Nwokedi, G. O. (2024). Contemporary trends of youth empowerment and employment in Nigerian society: A socio-Christian perspective. *Journal of Religion and Human Relations (JORAHR), 3*(4), 172–190.

Abidoye, T. A. (2020). The use of 3D printing in teaching mechanical design in Nigerian polytechnics. *Journal of Technical Education and Training, 12*(3), 45–59.

Adamu, L., Saidu, M., Abdullahi, F., & Usman, D. (2025). Influence of vocational and technical education on students' skills acquisition for self-reliance in North-East, Nigeria. *Kashere Journal of Education, 8*, 106–113.

Adebayo, O., & Abdulhamid, S. M. (2018). Cybercrime in Nigeria: Causes, effects and the way out. *Journal of Information Security Research, 9*(3), 108–115.

Adu, K. E., & Okwelle, P. C. (2021). Vocational skills acquisition and reduction of youth unemployment in Nigeria. *International Journal of Vocational and Technical Education, 13*(2), 23–35.

Aikhionbare, I. (2016). *Prospects and problems of vocational and technical education in Nigeria.* Info Guide Nigeria

Ajie, P. M., Ojobah, L. O., & Bassey, I. S. (2024). Refocusing mechanical technology education programmes for sustainable peace and development amongst youths in Rivers State. *African Education Indices, 3*(1), 1–15.

American Welding Society. (2013). *Advancing the science, technology, and application of welding and allied joining and cutting processes worldwide.* American Welding Society

Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education.* University of Chicago Press.

Dobrota, D., Rotaru, I., & Bondrea, I. (2020). Welded construction design of transition fittings from metal pipes to plastic pipes. *Metals, 10*(9), 2–20.

Economic and Financial Crimes Commission. (2023). *Annual report on cybercrime and youth involvement in Nigeria.* EFCC Publications.

Goni, O., Ali, M. H., Showrov, M. I. H., Alam, M., & Shameem, M. (2022). The basic concept of cybercrime. *Journal of Technology Innovations and Energy, 1*, 16–24.

Idibia, C., Thomas, C. G., Ugoji, P. C., & Idibia, C. A. (2022). Welding and fabrication craft practice: Innovative skills for technical college graduates' self-employment in 21st-century COVID-19-ravaged economy in Rivers State. *4*, 430–438.

Mikkola, M., Oksanen, A., & Paek, H. J. (2021). Situational and individual risk factors for cybercrime victimisation in a cross-national context. *International Journal of Offender Therapy and Comparative Criminology, 68*(5), 1365–1387.

Nwankwo, I. G., & Ogan, T. G. (2025). Mechanical technology education and its influence on human capital growth in Rivers State, Nigeria. *Ayden Energies Journal, 13*(1), 34–41.

Nwogu, U. C., & Okwelle, P. C. (2021). Youth empowerment through vocational and technical education in Nigeria: Challenges and prospects. *Nigerian Journal of Technical Education, 8*(1), 78–92.

Okwelle, P. C., & Oyenuga, A. O. (2022). Skill acquisition and youth crime reduction in Nigeria: The role of vocational education. *Journal of Educational Research and Development, 17*(4), 102–116.

Olowe, M. O. (2023). Vocational and technical education: A functional education for sustainable development in a global turbulent era. *International Journal of Vocational and Technical Education Research, 10*(1), 1–11.

Onwuadiamu, G. (2025). Cybercrime in criminology: A systematic review of criminological theories, methods, and concepts. *Journal of Economic Criminology, 8*(4), 1004–1020.

Onwusa, S. C., Nwaosa, C., & Kelubia, D. I. (2021). Entrepreneurial skills improvement needs by self-employment technical college automobile technology graduates in Delta State, Nigeria. *International Journal of Research and Innovation in Applied Science, 6*(10), 96–110.

Pazilovich, N. Z., & Mahammadjonovich, A. B. (2021). The concept of cybercrime, its peculiarities and cyber-security issues. *Journal NX – A Multidisciplinary Peer Reviewed Journal, 7*(9), 67–74.

Thomas, N. (2020). *Understanding different types and applications for pipe fittings.* Thomas Net article on pipe fittings

Uka, J. A. U., & Ochogba, C. O. (2019). Strategies for bridging skills acquisition gap amongst automobile technology students in tertiary institutions for self-reliance in Rivers State. *African Journal of Contemporary Research and Science Innovation, 7*(6), 150–155.

Williams, K. (2024). Understanding youth empowerment: A youth participatory action research approach. *Qualitative Research in Organizations and Management: An International Journal, 19*(5), 1–34.